



County of Los Angeles

Enterprise GIS Program

Guide to Publishing Maps for ESRI's ArcGIS for iOS/Android

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Contents

Overview	1
Phase 1: Creating a map service on your own server	1
Phase 2: Create your mobile map.....	3
Phase 3: Update your mobile map for deployment	5
Phase 4: Preparing to Publish your map to ArcGIS Server.....	8
Phase 5: Publishing the map to ArcGIS Server.....	10

Overview

This guide is designed to help folks deploy applications to ESRI's iPhone/iPad/Droid application from services published on their own server. There aren't a lot of good instructions out there which is why we have done this.

This assumes that you have an existing ArcGIS Server installation that you can publish map services to. Right now the assumption is that these services are public, but there are options for accessing secure services and we will update this in the future.

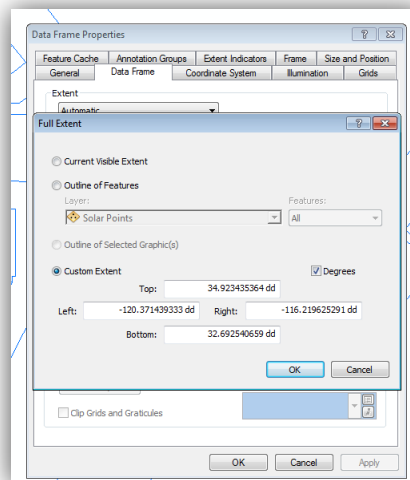
This document names some LA County servers. Note that while they are open right now they will begin to be shut down over the next few months so please do warned that if you use these services they may break in the future. You can contact LA County if you want to gain permanent access to them.

Phase 1: Creating a map service on your own server

You will first need to create a map document and publish it to ArcGIS Server. There are some tricks.

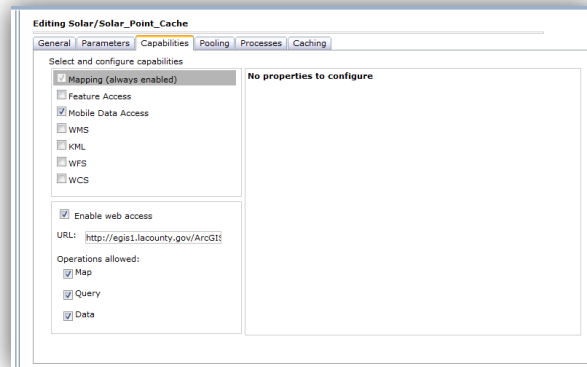
1. Authoring in ArcMap

The key is to set a maximum extent (under map properties/Data Frame/Extent used by Full Extent Command (see image below)

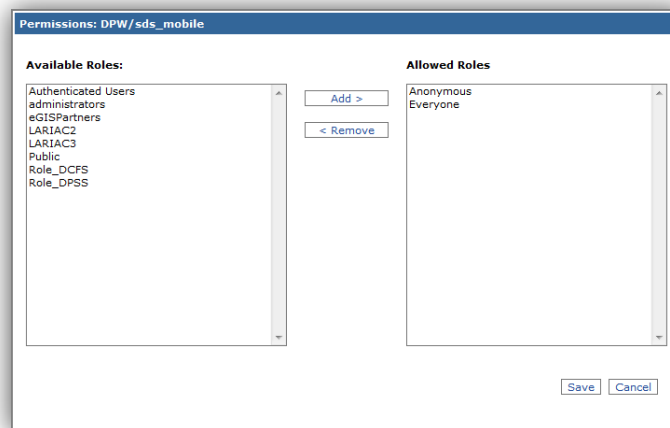


2. Publish to ArcGIS Server (requires ISD assistance or access to a public facing ArcGIS Server)

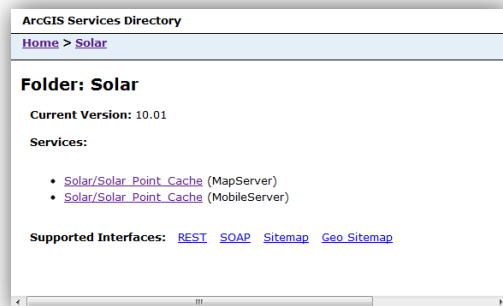
3. Make sure you click on "Mobile Data Access"



4. Make sure that you set security (at this point) for public access ("Anonymous") by clicking the lock box in the service list.



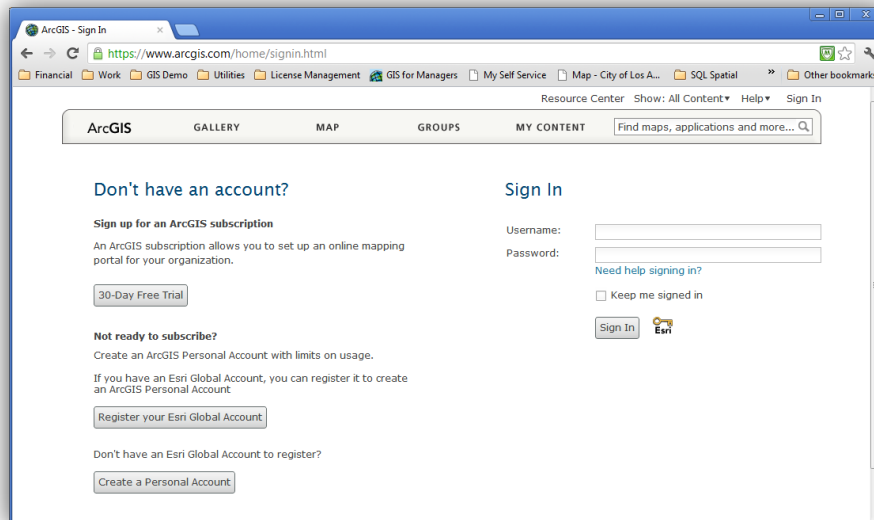
5. If you look at the REST endpoint Results you will see a new MobileServer instance:



Phase 2: Create your mobile map

For this part, you must have an Arcgis.com login (personal and not tied to an organization).

1. Go to arcgis.com and log in



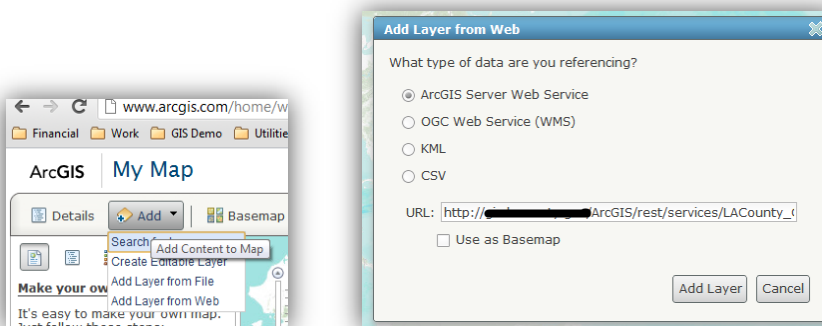
2. Click on Map to create a new map

In a separate tab or browser window:

3. Navigate to the basemap service you want to add (e.g. <http://<your ArcGIS Server>/ArcGIS/rest/services/<location of your basemap service>/MapServer>)

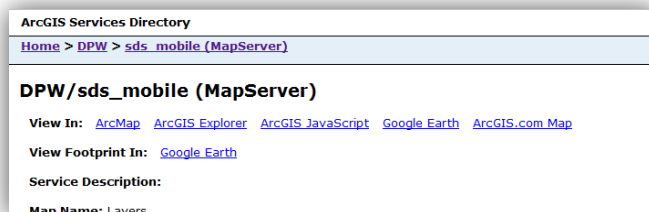
Note – make sure the last item is “Mapserver”

4. Copy the URL from the browser URL line
5. Go back to the map and click on “Add” and then select “Add Layer from Web”
6. Paste the URL you just copied into the URL box

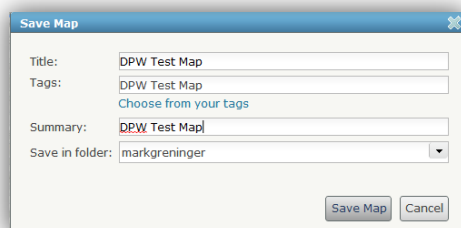
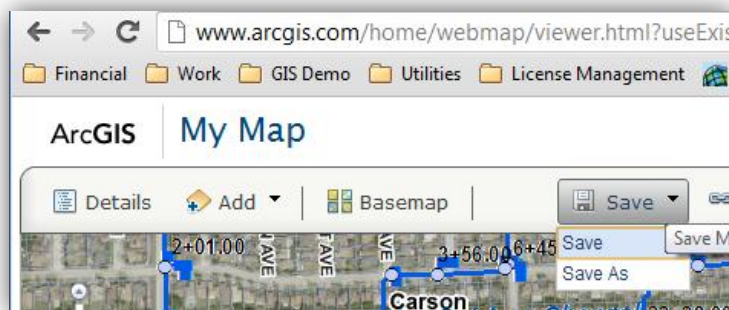


Do not click on “Use as Basemap” for any layer (you can select use as basemap for your basemap layer; otherwise, you will be laying it on top of an Esri basemap. Checking this box allows the user to switch back and forth among the basemap you just added and the online basemaps Esri provides).

7. Do the same set of instructions (7-10) for your dynamic data

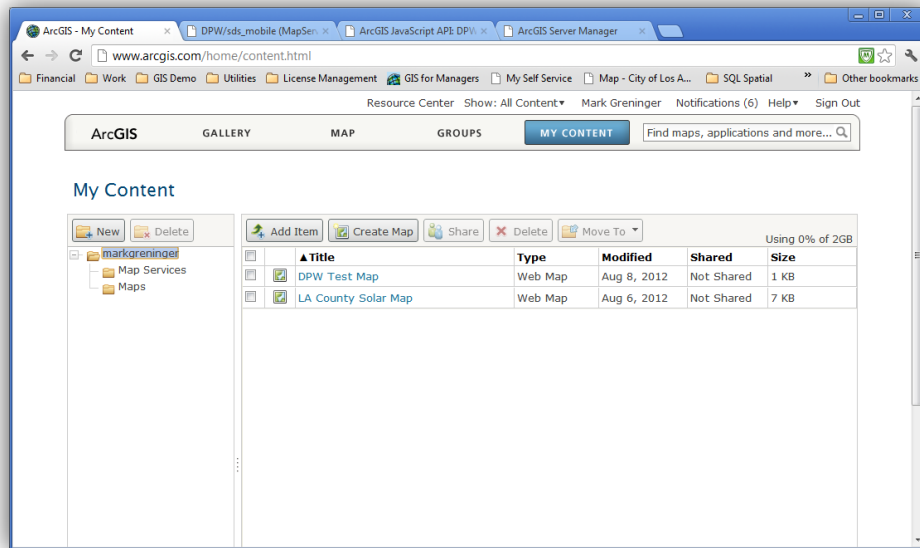


8. Click “Save” to save your map

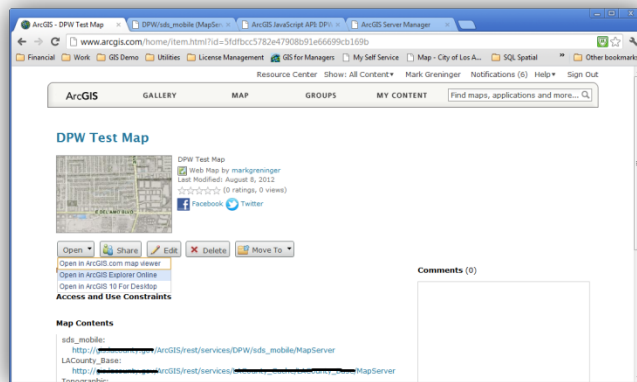


Phase 3: Update your mobile map for deployment

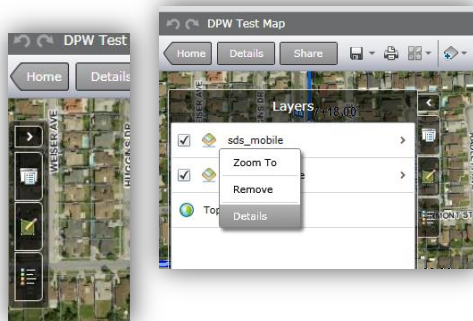
1. Click on “My Content” to go back to your content.



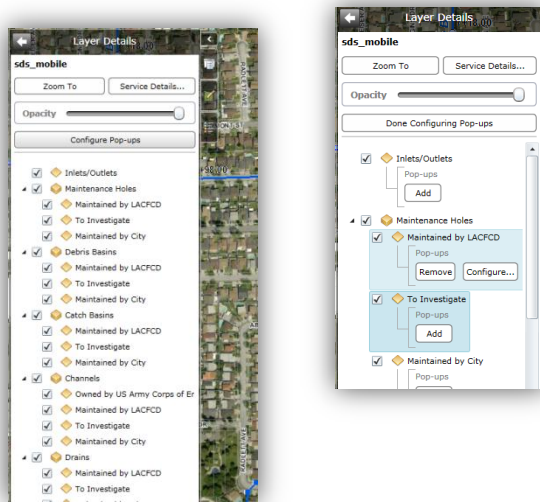
2. Click on the map that you just created to open it.
3. In the next window, click “Open” and open in ArcGIS Explorer Online



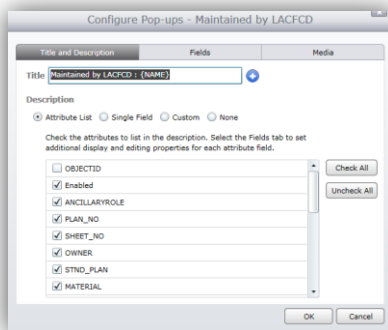
4. To edit the interactions on the mobile site, click on the right arrow “>” on the floating toolbar on the left and then click on the map service you want to update – then click “Details.”



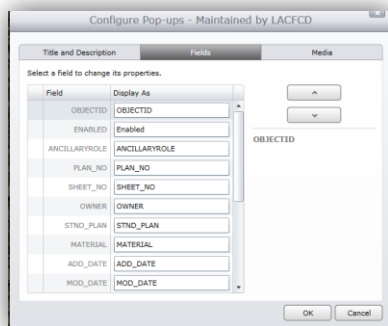
- Click on “Configure Popups” to begin configuring popups.



- When you click on configure you will be presented with a popup with three tabs.
- Tab 1: Title and Description – this is used to configure what is shown when a user clicks on the feature:

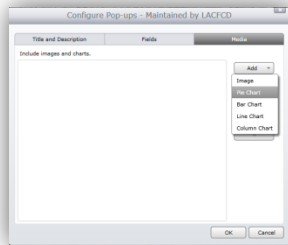


- Tab 2: Fields – lets you alias the field names and change their order:



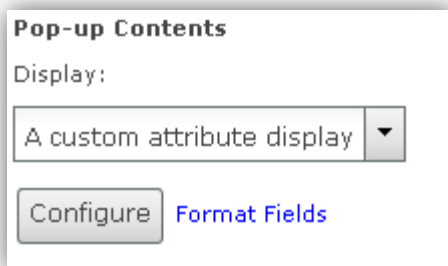
9. Tab 3: Media

Add Media (charts and graphs) related to data

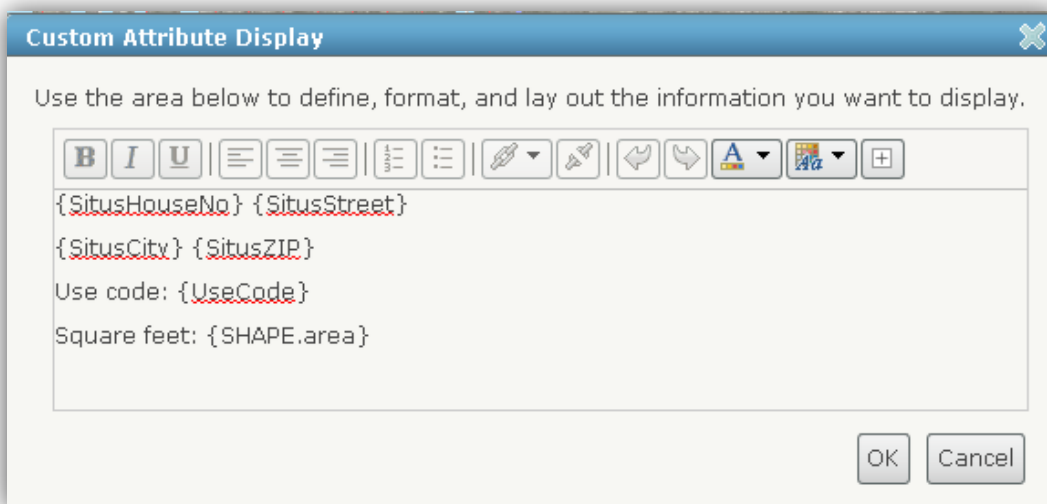


Continue to configure your popups across your layers so that they do what you want.

As an alternative to the field display, you can create a custom pop-up in which you can present some of your field data in a more formatted way:



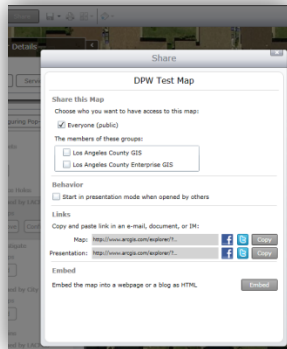
Type whatever text you want into this box and use the plus sign button at the end of the toolbar to add fields.



Phase 4: Preparing to Publish your map to ArcGIS Server

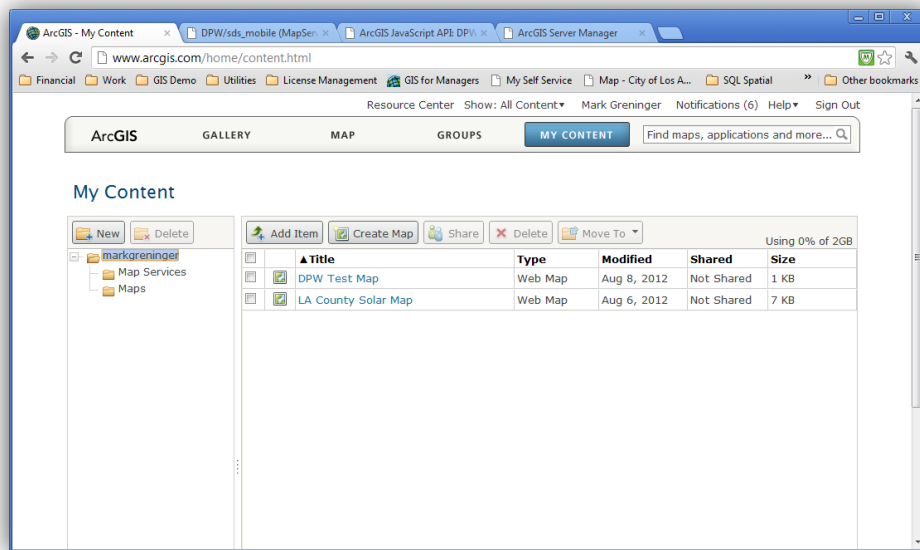
Now that you are done, time to publish to ArcGIS Server:

1. Save your map.
2. Share your map with Everyone (Public). This is required for you to see the JSON code that you have created – otherwise the information is protected and you can't get to it.



Next, you will need to get your map's unique identifier.

3. Click on “My Content” to go back to your content.

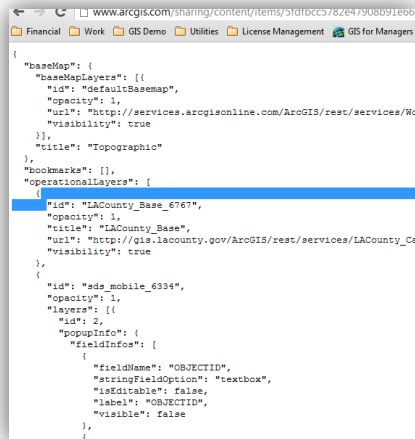


4. Click on the map that you just created to open it.
5. Look at the URL, it will have this format:
<http://www.arcgis.com/home/item.html?id=2c730097c56a4f0c8e3d2f7be67157de> <the very long text string (here is it 2c730097c56a4f0c8e3d2f7be67157de) is the identifier. Copy the identifier for the next step.

6. Next, open this URL:

<http://www.arcgis.com/sharing/content/items/d5e02a0c1f2b4ec399823fdd3c2fdebd/data?f=json>

7. Replace the long string in the browser URL with the long string you just copied and refresh the page. You should get a very long string of JSON, which contains all of the instructions to create your map:

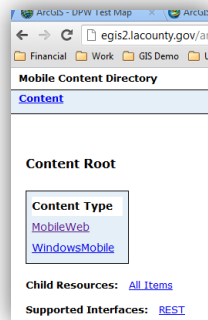


8. Copy all of the text (you can click in the window and type Ctrl+A) to select all of the text then Ctrl+C to copy all of the text) – and copy into a Notepad or some other text editor. If you wish, you can modify the text to, for example, add more bookmarks or modify the fields list.
9. Save this as some text document name (preferably with the name of the Mobile App you are creating).
10. Go back to ArcGIS.com and “unshare” your map so that it cannot be found on ArcGIS.com (recommended).
11. You will also need to note the following 5 items (I recommend creating another text document and noting them there).
- Item (required) – This may be as simple as the map name.
 - Title (generally the same as the Item)
 - Description
 - Snippet (optional)
 - Starting Extent in Lat/Lon (required) (This may be a point or a polygon; remember that the view window in an iPhone is very small and you may find a point works better than an extent.
 - A tiny image to use as the sample (38x50) (optional)
12. Email these two documents to the ArcGIS Server administrator along with the desired name of the application.

Phase 5: Publishing the map to ArcGIS Server

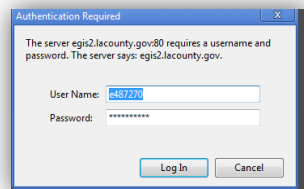
You must be an ArcGIS Server Administrator to complete these tasks:

1. Download the files from the email
2. Open up <http://<arcgisserver name>/arcgis/mobile/content>

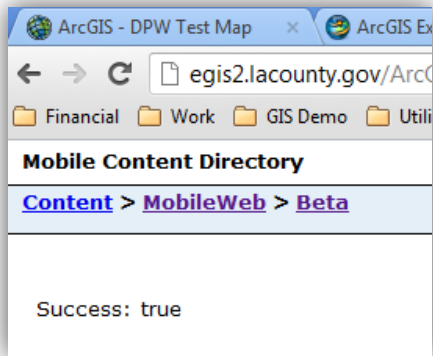


3. Click on "MobileWeb"
4. Click on the folder where you want to add/update the map app
5. Click on "Add Item"

Log in with the ArcGIS Server Administrator Account



6. Copy the JSON into the "Text Field"
7. Copy the Title information into the
 - a. Item, Name, and Title Field
8. Copy the Description into the Description field
9. Copy the snippet into the snippet field
10. Copy the Extent into the extent field
11. Click the "Add item" button to publish



12. You can now access the data from the iOS application.